# What Parents Need To Know About Safe Technology

"Parents should not panic over the latest research, but it can be used as a good reminder to limit both children's screen time and exposure from cell phones and other devices emitting radiation from electromagnetic fields (EMF)."

THE AMERICAN ACADEMY OF PEDIATRICS, 2016

"Children are disproportionately affected by environmental exposures, including cell phone radiation."

THE AMERICAN ACADEMY OF PEDIATRICS, 2013

## What Does the Science Say about Wireless and Children?



**Children absorb more wireless microwave radiation:** Research shows that children's brains, eyes and bone marrow absorb from three to ten times the radiation than adults.

The World Health Organization's International Agency for the Research on Cancer classified wireless radio frequency radiation as a Class 2 B, Possible Human Carcinogen. Cell and cordless phones have been linked to increased brain tumors. Risks are highest for those who first used a phone under the age of twenty.



2016: The National Institutes of Environmental Health Sciences, National Toxicology Program released findings of increased brain tumors (gliomas), increased schwann cell tumors of the heart and increased DNA damage in rats exposed to cell phone radiation.

Wireless radiation during pregnancy has been linked to to neurological and developmental abnormalities in the offspring of animals. Research shows hyperactivity, damaged reproductive systems, altered brain development, and damaged nervous systems when exposed to wireless radiation.

Wireless radiation at very low levels has been shown to change brain activity. In 2011, NIH researchers found brain glucose metabolism increased from cell phone radiation.

A 2011 Yale Medicine mice study found increased hyperactivity and memory problems after prenatal exposure. Now Harvard and Yale Doctors are recommending pregnant women reduce exposure. See BabySafeProject.org

### Countries Around the World are Taking Precautionary Action to Protect Children



Belgium, France, Australia, Russia, the United Kingdom, India, Finland, Turkey, Canada and the European Union have all taken measures to reduce children's exposure to wireless radiation by stricter regulations and/or issuing informative fact sheets for their citizens on how to reduce exposures to children.



#### Read the Manufacturer's Advice Written in Fine Print on Wireless Device Manuals

#### FROM THE SAMSUNG 3G LAPTOP MANUAL:

**"Usage precautions during 3G connection:** Keep safe distance from pregnant women's stomach or from lower stomach of teenagers.

"..the Council recommends limiting exposures... WiFi can be turned off and wired local area network (LAN) can provide a reliable and secure form of networking ..without any microwave electromagnetic field exposure."

- Maryland State Children's Environmental Health and Protection Advisory Council 2017

MORE AT: www.EHTrust.org

For children the cancer risks may be greater than that for adults because of greater penetration and absorption of cell phone radiation in the brains of children and because the developing nervous system of children is more susceptible.

## But wireless is everywhere, will wires really help?

Simple changes such as hardwiring computers and keeping tech on Airplane Mode will significantly reduce a child's daily exposure. **Since exposure is cumulative and children will have a lifetime to be exposed**, these changes could greatly reduce your child's risk of cancer and other diseases.

## Why is it legal?

**Wireless was not sufficiently premarket tested for safety.** It is not a food, drug, or chemical and a long term health risk assessment was never done by the FDA or EPA

## Is our government doing anything?

The FCC is reviewing our **outdated exposure limits**. These standards do not protect us from the biological effects of longterm low level exposures. The American Academy of Pediatrics is calling for the US to strengthen laws to protect child's health and to fund large scale research.

These protective regulations may take years to pass. **Parents can** take steps now to ensure safety at home and at school.

## New Jersey Education Association Review 11/2016 Minimize health risks from electronic devices

- Keep devices away from the body and bedroom.
- Put devices on desks, not laps.
- Hard wire all devices that connect to the internet.
- Hard wire all fixed devices such as printers, projectors and boards.
- Use hard-wired phones instead of cell or cordless phones.

## ENVIRONMENTAL HEALTH TRUST

MORE AT: EHTrust.org AND #PracticeSafeTech

 Ron Melnick PhD, Senior Toxicologist at National Institute of Environmental Health Sciences, Retired

### AMERICAN ACADEMY OF PEDIATRICS SAFETY TIPS FOR FAMILIES

- Use cell phones in speaker mode or with the use of hands-free kits.
- Avoid carrying your phone against the body like in a pocket, sock, or bra. Cell phone manufacturers can't guarantee that the amount of radiation you're absorbing will be at a safe level.
- If you plan to watch a movie on your device, download it first, then **switch to airplane mode while you watch** in order to avoid unnecessary radiation exposure.
- Keep an eye on your signal strength (i.e. how many bars you have). The weaker your cell signal, the harder your phone has to work and the more radiation it gives off.
- Avoid making calls in cars, elevators, trains, and buses. The cell phone works harder to get a signal through metal, so the power level increases.
  - Remember that cell phones are not toys or teething items.
  - Make only short or essential calls on cell phones.

### FIND OUT MORE AT

https://www.healthychildren.org/English/safetyprevention/all-around/Pages/Cell-Phone-Radiation-Childrens-Health.aspx

### Choose corded connections.

**Connect to Internet whenever possible using ethernet connections, not Wi-Fi.** It is as simple as running a cord from your router directly to your device and then turning off the wireless antennas of the router and the devices.

**Corded connections provide access to the same Internet** but without the bodypenetrating wireless radiation.



Adapters are available to connect ethernet cords to smaller devices such as tablets, e-readers, and smartphones.